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# A Study Of Teachers' Experiences Of The Integration Of Educational Technology Into The New English Language National Curriculum Of China

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### **ABSTRACT**

This thesis takes a look at eight secondary school teachers in Beijing, China, and how they used educational technology to teach English. It also takes a look at their perspectives on the elements that influence technology usage. This research found that, while instructors did utilise the internet and other modern tools in the classroom, PowerPoint was the most often used programme, according to data analysis of classroom recordings and follow-up interviews. Among their many pedagogical uses for educational technology were meeting professional demands for better instruction, creating instructional resources, and facilitating professional development. Additionally, educators said that technology was used by them to meet the demands of their students, namely in the areas of increased engagement, better language learning, easier comprehension, and the creation of a linguistic context. According to the research, teachers' views, resources availability, and teachers' skill and trust in technology were the four main elements that impacted teachers' technology usage, according to the research. According to this research, teachers may benefit from using a critical reflective approach to better understand their own pedagogical ideas and needs in relation to technology usage, according to this research. Teachers' competency and confidence in using technology in the classroom may be enhanced via ongoing professional development opportunities.

This chapter delves into the fascinating background of ELT in China and how teachers have been empowered to adapt to new curriculum. Given the present ecological systems in which both students and educators find themselves, the difficulty of putting theory into practice becomes more apparent.

**KEYWORD:** Teachers' Experiences, Integration Educational, Technology, English Language, National Curriculum, China.

### 1. INTRODUCTION

Modern educational technology Due to technology's pervasiveness, traditional methods of instruction have undergone significant shifts. As a result of technology's pervasiveness in everyday life, many educators and their students have access to new resources that could enhance language instruction. There has been a lot of push in the past decade for universities to improve the quality of their curricula and find new ways to teach students to solve world problems. Universities are compelled to "think outside the box" due to the intense rivalry in the higher education market. In order to stay competitive, colleges need to make use of technological advancements to make teaching more efficient and increase learning outcomes. The use of technology in EFL classrooms has grown in recent years due to its many benefits, including increased student motivation, access to real-world language learning environments, and a wider range of language inputs (Cheng, 2020). Multimedia materials, relevant activities, and language practice made possible by the ever-expanding capabilities of computers also lend themselves to" English as a foreign language instruction and learning" (EFL). Technology acceptability in teaching and learning has lately gained popularity, emphasised the need of

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relevant technology integration in educational contexts. It would be naïve to think that advances in technology would inevitably improve language classroom instruction. How educators see technology has the potential to influence how they use it in the classroom. As a result, this influences how students learn. Teachers' perspectives on technology integration should be carefully studied. Technology integration: a definition "A technology integration is the degree to which technology is used to facilitate teaching and learning" according to this research. As a catch-all phrase, it describes the integration of various forms of technological resources into educational practices with a focus on achieving course objectives (Zhang, 2020).

# 2. BACKGROUND OF THE STUDY

The Technology Acceptance paradigm (TAM) is a term that is frequently used to describe the technology acceptance paradigm. When it comes to representing how receptive students are to new technologies in the classroom, the has been the go-to model for as long as anybody can remember. In accordance with the concept, there are two perceptions that have an impact on the desire to make use of technological tools. These perceptions are the perceived usefulness of the tools and the perceived ease of using them (Huang, 2019). When it comes to both of these perceptions, the perceived simplicity of usage is included. Elements that make up the TAM. A number of advantageous conditions that placed an emphasis on environmental traits or features were included in these components. Research has demonstrated that the aforementioned viewpoints, in conjunction with the component of enabling conditions, are advantageous when it comes to the process of projecting the adoption and utilisation of current information technology. Over the course of the past few years, a growing number of studies have been carried out to study the ways in which the ideas that motivate individuals have an effect on their perspectives and their willingness to accept new technologies. According to Cao (2020), the item that sheds the most light on the overarching, experience-based viewpoints that instructors have on the usage of technology is the motivating beliefs that they hold. There is a possibility that these viewpoints on what motivates individuals will have a substantial impact on how they perceive the application of technology. The expectancy-value theory is widely considered to be one of the most influential interpretations of what motivates people (Cao, 2020).

This theory proposes that individuals' subjective task values, which include things like utility values, playfulness, and cost, as well as their expectations for the chances of success, which include things like self-efficacy, determine whether or not they do a work while an individual has confidence in his or her capabilities, that individual is less likely to be pessimistic when working on a project and more likely to take pleasure in the process of accomplishing the work while they are working. As a consequence of all of these factors, there will be a larger degree of acceptance of that responsibility (Fu, 2020).

### 3. THE PURPOSE OF THE RESEARCH

The goal here is to find out whether there are any restrictions in this area that prevent instructors from doing their jobs well. In addition, the research seeks to comprehend the perspectives of educators on the integration of technology into their instructional strategies.

The study's secondary objective is to examine how quickly ESL educators have incorporated technological tools into their classroom practices. Its goal is to ascertain this adoption rate by analysing instructors' proficiency and understanding of technological tools.

The use of electronic devices in the process of language learning in China has received almost little attention from researchers, and even fewer studies have investigated the application of tech to learning in China in general. As a result, there has never been any other study carried out in the field of education that is comparable to this one. It is the first research to look at how primary school, high school and university teachers in China are using instructional technology into their lessons, according to the authors. The study's overarching goal is to shed light on the gaps in relevant parties' preparations and instructors' attitudes towards technology integration into their pedagogical stances and practices.

### 4. LITERATURE REVIEW

A comprehensive definition of technology that encompasses both "traditional or established methods" (like

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computers, emails, and cell phones) and "new or emerging technologies" (like wikis, podcasts, and other forms of Web 2.0 technologies). Additionally, this definition encompasses other technologies that have the potential to make learning and teaching easier. The phrase "technology integration" describes the degree to which technology for communication and information is used in educational settings in order to make education and learning more accessible. Additionally, it is essential to keep in mind that the use of electronic devices in educational settings is not the only facet of technological integration. On the other hand, integration can only be accomplished when technology is used in an efficient manner to assist learning and teaching initiatives. The fulfilment of pedagogical objectives and the resolution of instructional issues, as well as the recognition of educational technology is an essential component of the teaching process, constitute one of the primary principles behind the integration of technology (Alzubi, 2019). It is also essential for educators to give careful consideration to the complex link that exists between the utilisation of technology and pedagogy, since this is essential to their success in the process of integrating technology. Additionally, they should have a solid understanding of how to use pedagogical ideas in order to guide their utilisation of technology for educational objectives (Canals, 2019).

It has been shown via research that English instructors commonly make use of conventional technology such as word processors, PowerPoint, and other similar tools. On the other hand, instructors make use of new and developing technologies like Rosetta Stone and Second Life on a less regular basis. Although most of this empirical data comes from surveys and interviews, there are a handful of studies that combine the two types of data to delve even further into how educators utilise technology in the classroom. In addition, the majority of the study that has been done so far has focused on education professionals who are employed in middle and high schools, as well as pre-service primary and secondary school teachers. A dearth of expertise exists about the integration of technological devices by university instructors, particularly in the context of Chinese English is a Foreign Language programs (Lin, 2020). This is especially true in the context of the Chinese language.

### 5. RESEARCH QUESTION

To fulfil the research aims a primary research question was formulated and then sub-divided into further sub-questions to be addressed. The main research question for this study is:

- 1. What are English language teachers' experiences of implementing the new English Language curriculum in primary schools in China?
  - **\*** The main question is subdivided into sub-questions:
- 2. To what extent did teachers embed technology in the new curriculum?
- 3. What are the barriers/ enablers that teachers faced in embedding technology into the new curriculum?
- 4. What were the rates of adoption of the curriculum innovation by the various teachers involved in the study?

### 6. METHODOLOGY

The researcher will use convenient sampling technique in this study. The study's emphasis on psychological traits made it the pioneering use of a multi-method matrix. Other researchers began gathering data in various formats as a result of their study.

**Research Design:** The quantitative data will be analyzed using SPSS version 25. The strength and direction of the statistical association will be measured according to the odds ratio and the 95% confidence interval. The statistically significant level will report at p < 0.05. Descriptive analysis will be applied to understand the basic nature of the data.

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The primary approach employed in this research was interviewing. In a limited way, nevertheless, it may be regarded as mixed methods since an online survey was also used.

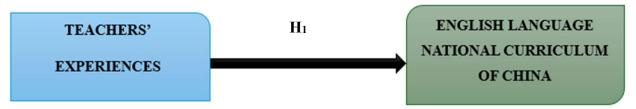
Sampling: Convenient sampling technique will be applied for the study. The subjects in the study will be Chinese Organisation.

**Data and Measurement:** Primary data for the research study will be collected through quantitative analysis. Secondary data will be collected from multiple sources, primarily internet resources. Interviews are one of the most popular and effective ways to gather data because of their versatility. Interviewing is a crucial qualitative data gathering technique that may be used to explore and describe educational practices and challenges, according to experts. Interviews enable a researcher to conduct a more thorough investigation of the topic with the interviewees than would otherwise be feasible. Researchers suggest using pre- and post-interviews until data saturation occurs. The goal of conducting interviews is to gather information about respondents' perspectives about the issue under investigation as well as to aid in the comprehension and assessment of various circumstances.

Statistical Software: MS-Excel and SPSS 25 will be used for Statistical analysis.

**Statistical Tools:** Descriptive analysis will be applied to understand the basic nature of the data. The researcher shall apply ANOVA for analysis of the data.

# (i) CONCEPTUAL FRAMEWORK



### 6. RESULTS

# • English Language National Curriculum of China

In light of the tremendous societal and technological shifts that have occurred since the new millennium, the Ministry of Education will revise the current basic education curriculum. The English curriculum project team was formed in June 1999 by thirteen individuals. Researchers, teacher educators, ELT consultants, and research fellows from many walks of life made up this diverse group. Throughout the planning stages of the project, three separate national consultation sessions were scheduled. Academics, scientists, businesspeople, classroom teachers, members of political consultative committees, and representatives of the people's congress were among the hundreds of participants in a national consultation called by the Ministry of Education (MOE) prior to the release of the pilot curriculum. The consultation procedure was attended by ten provinces.

To date, no curriculum has been as all-encompassing as the new English curriculum. Dedicated to the ideals of high-quality education, it helps students become more well-rounded individuals by encouraging the growth of their critical thinking, practical language skills, and capacity for imaginative play. Concerning the goals, content, methodologies, and evaluation of EngUsh instruction, there have been substantial shifts in perspective. Here is a brief rundown of what the new curriculum covers. An Emphasis on Holistic Education through Language Acquisition A shift in perspective regarding the value of ESL education is reflected in the new curriculum's overarching goal. As children progress through the stages of language acquisition, the emphasis shifts from merely imparting the language to fostering their personal growth. Once students have fully developed their language abilities, knowledge, emotions, learning strategies, and cultural awareness, they will be more proficient in utilising English in all situations (Mei, 2019).

The new curriculum places a strong emphasis on instructors' proficiency with and capacity to make better use of multimedia technology in the classroom. To maximise the learning opportunities of today's pupils, it promotes the use of modern instructional technologies such computers, the Internet, English language periodicals, TV and radio

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programmes, remote language learning, and multimedia resources. While the new curriculum was being established, a change in textbook production rules opened the door for other companies to compete for national textbook contracts. The textbooks are recommended to schools by the MOE textbook review committee once they are authorised. A new age in textbook development is dawning, one that will enable numerous textbooks to address the unique requirements of various locations. For beginner, intermediate, and advanced levels of English, there are over twenty books available. For a long time, educators have been woefully uninformed about the national curriculum, which highlights the critical importance of this change. The content of textbooks and exams takes up the vast majority of their time and energy. Teachers heavily depend on textbook writers to include the syllabus's objectives, subject matter, and suggested methods into the final product. This is yet another consequence of the syllabus's construction; requirements are frequently overly broad for instructors to effectively implement in the classroom. As a result, the use of textbooks in ESL classrooms has been significant (Hernandez, 2016). It is anticipated that there will be changes with the publication of multiple textbooks and the new English curriculum. Instead than relying on a single textbook, exams will now be structured according to the level descriptors found throughout the revised curriculum. While textbooks will remain useful, instructors must be familiar with the new curriculum's requirements, levels, and standards in order to plan lessons accordingly.

### • Teachers' Experience

There are three separate entities involved in the educational process in this setting: the instructor, the students, and the administration of instruction. Using tools like real-time response, screen sharing, and random calls, educators may capture students' attention and boost classroom efficiency. Additionally, they assess the students' understanding of the subject matter through the use of in-class quizzes (Scherer, 2019).

Furthermore, students can take notes directly from their electronic textbooks and submit their assignments instantly using their mobile devices. By connecting their mobile devices to the school, teacher, and student websites, parents may keep tabs on their children's personal situations in real time. Processing and storing data, including statistics, for simple access is another capacity of the school's back office. The "Smart classroom" approach to education has been introduced to six classes at Wenshan Siyuan Experimental School as of March 1, 2018.

Over time, students have developed a learning style that is collaborative, inquisitive, and self-directed. Because of this, their schooling has become better and they are once again enthusiastic about learning. By keeping in close contact with their professors even after class has ended, students can greatly enhance their learning efficiency. Many different kinds of instructional technologies make it easy for teachers to conduct classroom activities like explanations, Q&A, and roll call. Students have access to a variety of more accessible teaching strategies as a result of the joint work of curriculum and information technology. In an interview, Zhou—a fifth grade teacher at Wenshan Experimental School—described the "smart classroom" as the complete digitization of data pertaining to education, administration, research, and life services. Zhou was referring to the campus's adoption of scientific, standardised management practices and computer technologies in his statement. The fundamental element of this system is the integration of wireless networks into educational settings to supplement instruction that does not rely on paper. Many educators now feel more confident in their ability to educate thanks to the smart classroom technique, and students are finding more joy in their studies as a result. The "Smart Classroom" method of instruction calls for more frequent two-way communication between educators and their charges. Teachers have the ability to offer students individualised assistance for the challenges they are facing. Students can provide immediate feedback to instructors on their progress in learning by utilising the learning terminal. China is actively promoting and utilising smart education as part of its effort to modernise its educational system. New and improved methods of instruction are what smart education is all about (Tondeur, 2018). Teachers in an intelligent classroom design learning spaces and environments, integrate and utilise educational technology and resources, reorganise the classroom's ecology, and give students detailed directions on how to complete learning activities such as experiential learning, blended learning, and personalised learning.

### • ANOVA TEST RESULT

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Table 1: H<sub>1</sub> ANOVA

| ANOVA          |                |      |             |          |      |
|----------------|----------------|------|-------------|----------|------|
| Sum            |                |      |             |          |      |
|                | Sum of Squares | df   | Mean Square | F        | Sig. |
| Between Groups | 39936.307      | 488  | 3993.631    | 2485.855 | .000 |
| Within Groups  | 145.083        | 711  | 1.630       |          |      |
| Total          | 40081.390      | 1199 |             |          |      |

The outcome is noteworthy in this investigation. Statistical significance is achieved with a p-value of .000 (less than the .05 alpha level), and the value of F is 2485.855. What this implies is that we may accept the alternative hypothesis, "H<sub>1</sub>: There is a significant relationship between Teachers' Experiences with English Language National Curriculum of China." is accepted and reject the null hypothesis.

# 7. DISCUSSION

When studying human populations, demographics are a useful piece of statistical data. The characteristics that set a population apart are its demographics. The application of demography allows for the analysis of societies or even small groups of people. Some examples of demographic information include age, gender, educational attainment, racial/ethnic background, and religious faith. Age, gender, family income, race/ethnicity, education level, marital status, profession, and many more demographic variables allow researchers to divide the population into subgroups. The cross-sectional design was economical and efficient since it only needed data collected at one point in time. A quantitative strategy was chosen by the researcher despite the limited time and resources available. After 1350 questionnaires were issued and 1280 were returned, 80 were eliminated because they were not completely completed; the Rao-soft algorithm calculated a sample size of 1,177. A total of one thousand two hundred people filled out the survey. The survey was sent to all respondents, and a random selection was made for the sample. Researchers briefed participants about the study and were on hand to answer questions while they waited for their turn to do the activity; individuals who consented to participate also received information about the investigation. If a respondent is wheelchair-bound or otherwise unable to read or write, the researcher will read the survey questions and response categories aloud. After then, the researcher would type their responses into the survey form as they were said. People are given surveys to complete and send simultaneously in certain places.

### 8. CONCLUSION

It has never been more necessary for English teachers to be adept in technology-based education and to be able to manage a technology-based classroom. Therefore, it is of the utmost importance to have a solid understanding of the factors that motivate instructors to continue using technology in the classroom with their students. The objective of this research was to determine the factors that play a role in determining whether or not English language teachers who are employed in junior secondary schools in Western China are interested in continuing to make use of technology. In this study, the relationships between growth mindset, mediating self-efficacy, enabling conditions, effort regulation, interest, perceived ease of use, perceived usefulness, and intention to continue were investigated. It has been shown that the motivation of instructors to continue using technology is influenced by a number of factors, including a development mindset, supportive conditions, effort control, help seeking, perceived ease of use, and perceived value. On the other hand, investigations demonstrated that interest had little impact on the result. By means of self-efficacy, facilitating conditions and the perception of ease of use did have an indirect impact on the desire to continue using the product. On the other hand, self-efficacy did not play a role in mediating the relationship between continuing intention and characteristics such as interest, perceived utility, effort management, growth mindset, and interest. It has been proposed that instructors focus

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on improving their own sense of self-efficacy in order to inspire students to continue using technology (Siddiq, 2019).

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